WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

a semiconductor substrate including an SOI region where a first insulating film is buried, and a non-SOI region, said semiconductor substrate being provided with a boundary region formed between said SOI region and said non-SOI region and having a second insulating film buried therein, said second insulating film being inclined upward from the SOI region side toward the non-SOI region side, said second insulating film having a thickness which is smaller than the thickness of said first insulating film and being tapered from the SOI region side to the non-SOI region side;

a pair of element isolating insulating regions separately formed in said non-SOI region of semiconductor substrate and defining element regions;

a pair of impurity diffusion regions formed in said element regions and in contact with said element isolating insulating regions, respectively; and

a gate electrode formed via a gate insulating film in the element region of said semiconductor substrate.

2. The semiconductor device according to claim 1, wherein said second insulating film formed in said boundary region of said semiconductor substrate is buried as a continuous film all along the lateral direction of said boundary region.

3. The semiconductor device according to claim 1,

wherein said second insulating film formed in said boundary region of said semiconductor substrate is intermittently formed in said boundary region.

4. The semiconductor device according to claim 1, wherein the width of said boundary region in said semiconductor substrate is within the range of 1 to 5 μm.

5. The semiconductor device according to claim 1, wherein the distance from one end of said boundary region located on the non-SOI region side to said impurity diffusion region is 0.5 μm or more.

6. The semiconductor device according to claim 1, wherein said semiconductor substrate is a silicon substrate.

7. The semiconductor device according to claim 1, wherein said first insulating film and said second insulating film are both formed of a silicon oxide film.

8. A method of manufacturing a partial SOI substrate comprising:

forming a mask on a predetermined region of a semiconductor substrate;

isotropically etching a surface of exposed region of said semiconductor substrate to form a recessed portion and to permit an edge portion of said mask to overhang over said semiconductor substrate;

implanting oxygen ions into said semiconductor

substrate;

heat-treating said semiconductor substrate to form a buried oxide film in said semiconductor substrate, concurrently to form a thermal oxide film on a surface of said semiconductor substrate; and

removing said mask and said thermal oxide film formed on the surface of said semiconductor substrate.

9. The method according to claim 8, wherein said isotropic etching of said semiconductor substrate is performed using gas.

10. The method according to claim 9, wherein said gas is hydrochloric acid gas.

11. The method according to claim 8, wherein said oxygen ions are implanted perpendicular to the major surface of said semiconductor substrate.

12. The method according to claim 8, wherein said oxygen ions are implanted obliquely to the major surface of said semiconductor substrate.

13. The method according to claim 8, wherein said recessed portion is formed on the surface of said semiconductor substrate to a depth of 0.1 to 0.5 μm.

14. A method of manufacturing a partial SOI substrate comprising:

successively depositing an oxide film and a nitride film to form a mask on a predetermined region of a semiconductor substrate;

thermally oxidizing a surface of exposed region of

said semiconductor substrate to form a thermal oxide film;

removing said thermal oxide film formed on the surface of said semiconductor substrate to form a recessed portion on a surface of said semiconductor substrate;

implanting oxygen ion into said semiconductor substrate;

heat-treating said semiconductor substrate to form a buried oxide film in said semiconductor substrate, concurrently to form a thermal oxide film on a surface of said semiconductor substrate; and

removing said mask and said thermal oxide film formed on the surface of said semiconductor substrate.

15. The method according to claim 14, wherein said oxide film and said nitride film constituting said mask are formed such that the end faces thereof are aligned with each other, and said oxygen ions are implanted perpendicular to the major surface of said semiconductor substrate.

16. The method according to claim 14, wherein an end portion of said oxide film constituting said mask is removed together with said thermal oxide film formed on the exposed surface of said semiconductor substrate to permit an end portion of said nitride film to overhang, and said oxygen ions are implanted obliquely to the major surface of said semiconductor substrate.

17. The method according to claim 14, wherein said recessed portion is formed on the surface of said semiconductor substrate to a depth of 0.1 to 0.5 μm.

18. A method of manufacturing a partial SOI substrate comprising:

successively depositing an oxide film and a nitride film on a predetermined region of a semiconductor substrate;

isotropically etching said oxide film to remove an edge portion of said oxide film and to make an end face of said oxide film into an inclined surface;

removing said nitride film;

implanting oxygen ions into said semiconductor substrate with said oxide film having inclined end face being employed as a mask;

heat-treating said semiconductor substrate to form a buried oxide film in said semiconductor substrate, concurrently to form a thermal oxide film on a surface of said semiconductor substrate; and

removing said mask and said thermal oxide film formed on the surface of said semiconductor substrate.

19. The method according to claim 18, wherein said isotropic etching of said oxide film is performed by wet etching.

20. The method according to claim 18, wherein said oxygen ions are implanted perpendicular to the major surface of said semiconductor substrate.